

We claim:

1. A substantially purified nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43 and
5 complements thereof.
2. A substantially purified nucleic acid molecule that encodes a protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.
3. A transformed cell or organism comprising a nucleic acid molecule comprising a
10 nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43 and complements thereof.
4. The transformed cell or organism according to claim 3, wherein said cell or organism is a plant cell or plant.
5. The transformed cell or organism according to claim 4, wherein said cell or
15 organism is a plant selected from the group consisting of cotton, wheat, maize, teosinte and soybean.
6. A substantially purified protein comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.
7. A purified antibody which is capable of specifically binding to a protein, wherein
20 the protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86.
8. A transformed plant having a nucleic acid molecule which comprises: (A) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule; (B) a structural nucleic acid molecule encoding a protein comprising an
25 amino acid sequence selected from the group consisting of SEQ ID NO: 44 through SEQ ID NO: 86 and fragments thereof, and (C) a 3' non-translated sequence that functions in a

